

CLAIMS

1. An optical printhead comprising:

a light source,

5 a light guide including a light incident surface facing the light source and a flat light emitting surface extending in a primary scanning direction; and

a light collecting layer facing the light emitting surface and transmitting light emitted from the light emitting surface;

10 wherein the light collecting layer causes diffused light from the light emitting surface to be collected in a normal direction of the light emitting surface.

2. The optical printhead according to claim 1, wherein the
15 light guide includes a counter surface extending in the primary scanning direction and arranged opposite to the light emitting surface, the counter surface being provided with a plurality of inclined portions for reflecting light traveling in the light guide so that the light is directed toward the light
20 emitting surface.

3. The optical printhead according to claim 2, further comprising a mirror reflector covering the counter surface.

25 4. The optical printhead according to claim 1, wherein the light collecting layer comprises a first prism layer provided with a plurality of ridges extending parallel to each other.

5. The optical printhead according to claim 4, wherein each of the ridges includes a triangular section.

6. The optical printhead according to claim 4, wherein each
5 of the ridges extends parallel to the primary scanning direction.

7. The optical printhead according to claim 4, further comprising a second prism layer cooperating with the first
10 prism layer for collecting light, wherein the second prism layer is provided with a plurality of ridges extending parallel to each other, each of the ridges of the second prism layer extending across the ridges of the first prism layer.

15 8. The optical printhead according to claim 7, wherein each of the ridges of the second prism layer includes a triangular section.

9. The optical printhead according to claim 1, further
20 comprising a liquid crystal shutter facing the light emitting surface of the light guide via the light collecting layer, wherein the liquid crystal shutter comprises a plurality of shutter portions arranged in a row extending in the primary scanning direction.

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10. An image forming apparatus comprising:

an optical printhead according to claim 1; and

a photosensitive recording medium irradiated by the optical printhead.